

18351  
U.S. PTO

022504

PTO/SB/05 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	DEE-PT154
First Inventor	PI-CHUANG SU
Title	FLEXIBLE PRINTED CIRCUIT BOARD
Express Mail Label No.	EV 442788236 US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 14]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the invention
  - Brief Summary of the invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 8]
5. Oath or Declaration [Total Sheets 2]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☐ Computer Reader Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: PTO-2038 Form

22859 U.S. PTO  
10/786745

022504

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Art Unit: \_\_\_\_\_

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 3624 OR ☐ Correspondence address below

Name	VOLPE AND KOENIG, P.C.		
Address			
City	State	Zip Code	
Country	Telephone	Fax	
Name (Print/Type)	C. Frederick Koenig III		Registration No. (Attorney/Agent)
Signature			29,662
			Date
			February 25, 2004

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

022504

18351

Express Mail Label No. EV 442788236 US

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<h1 style="margin: 0;">FEE TRANSMITTAL</h1> <h2 style="margin: 0;">for FY 2004</h2> <p style="font-size: small; margin: 0;">Effective 10/01/2003. Patent fees are subject to annual revision.</p>		<b>Complete if Known</b>		
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number		Not Yet Known
		Filing Date		Not Yet Known
		First Named Inventor		Pi-Chuang Su
		Examiner Name		Not Yet Known
		Art Unit		Not Yet Known
TOTAL AMOUNT OF PAYMENT		(\$)		810.00
		Attorney Docket No.		DEE-PT154

<h3 style="text-align: center; margin: 0;">METHOD OF PAYMENT (check all that apply)</h3> <p> <input type="checkbox"/> Check           <input checked="" type="checkbox"/> Credit card           <input type="checkbox"/> Money Order           <input type="checkbox"/> Other           <input type="checkbox"/> None       </p> <p> <input checked="" type="checkbox"/> Deposit Account:       </p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;">         Deposit Account Number: 22-0493       </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;">         Deposit Account Name: Volpe and Koenig, P.C.       </div> <p>         The Director is authorized to: (check all that apply)       </p> <p> <input type="checkbox"/> Charge fee(s) indicated below           <input checked="" type="checkbox"/> Credit any overpayments       </p> <p> <input checked="" type="checkbox"/> Charge any additional fee(s) or any underpayment of fee(s)       </p> <p> <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.       </p> <h3 style="text-align: center; margin: 0;">FEE CALCULATION</h3> <div style="border: 1px solid black; padding: 5px;"> <h4 style="margin: 0;">1. BASIC FILING FEE</h4> <table style="width: 100%; font-size: small;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>1001 770</td> <td>2001 385</td> <td>Utility filing fee</td> <td>770.00</td> </tr> <tr> <td>1002 340</td> <td>2002 170</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>1003 530</td> <td>2003 265</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>1004 770</td> <td>2004 385</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>1005 160</td> <td>2005 80</td> <td>Provisional filing fee</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (1)</b></td> <td><b>(\$ 770.00)</b></td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <h4 style="margin: 0;">2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</h4> <table style="width: 100%; font-size: small;"> <tr> <td>Total Claims</td> <td>20</td> <td>- 20</td> <td>= 0</td> <td>X</td> <td>Fee from below</td> <td>0</td> <td>Fee Paid</td> <td>0</td> </tr> <tr> <td>Independent Claims</td> <td>2</td> <td>- 3</td> <td>= 0</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Multiple Dependent</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <table style="width: 100%; font-size: small;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>1202 18</td> <td>2202 9</td> <td>Claims in excess of 20</td> <td></td> </tr> <tr> <td>1201 86</td> <td>2201 43</td> <td>Independent claims in excess of 3</td> <td></td> </tr> <tr> <td>1203 290</td> <td>2203 145</td> <td>Multiple dependent claim, if not paid</td> <td></td> </tr> <tr> <td>1204 86</td> <td>2204 43</td> <td>** Reissue independent claims over original patent</td> <td></td> </tr> <tr> <td>1205 18</td> <td>2205 9</td> <td>** Reissue claims in excess of 20 and over original patent</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (2)</b></td> <td><b>(\$ 0)</b></td> </tr> </tbody> </table> <p style="font-size: x-small; margin-top: 5px;">**or number previously paid, if greater; For Reissues, see above</p> </div>	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	1001 770	2001 385	Utility filing fee	770.00	1002 340	2002 170	Design filing fee		1003 530	2003 265	Plant filing fee		1004 770	2004 385	Reissue filing fee		1005 160	2005 80	Provisional filing fee		<b>SUBTOTAL (1)</b>			<b>(\$ 770.00)</b>	Total Claims	20	- 20	= 0	X	Fee from below	0	Fee Paid	0	Independent Claims	2	- 3	= 0	X					Multiple Dependent								0	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	1202 18	2202 9	Claims in excess of 20		1201 86	2201 43	Independent claims in excess of 3		1203 290	2203 145	Multiple dependent claim, if not paid		1204 86	2204 43	** Reissue independent claims over original patent		1205 18	2205 9	** Reissue claims in excess of 20 and over original patent		<b>SUBTOTAL (2)</b>			<b>(\$ 0)</b>	<h3 style="text-align: center; margin: 0;">FEE CALCULATION (continued)</h3> <div style="border: 1px solid black; padding: 5px;"> <h4 style="margin: 0;">3. ADDITIONAL FEES</h4> <table style="width: 100%; font-size: small;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>1051 130</td> <td>2051 65</td> <td>Surcharge - late filing fee or oath</td> <td></td> </tr> <tr> <td>1052 50</td> <td>2052 25</td> <td>Surcharge - late provisional filing fee or cover sheet</td> <td></td> </tr> <tr> <td>1053 130</td> <td>1053 130</td> <td>Non-English specification</td> <td></td> </tr> <tr> <td>1812 2,520</td> <td>1812 2,520</td> <td>For filing a request for <i>ex parte</i> reexamination</td> <td></td> </tr> <tr> <td>1804 920*</td> <td>1804 920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td></td> </tr> <tr> <td>1805 1,840*</td> <td>1805 1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td></td> </tr> <tr> <td>1251 110</td> <td>2251 55</td> <td>Extension for reply within first month</td> <td></td> </tr> <tr> <td>1252 420</td> <td>2252 210</td> <td>Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253 950</td> <td>2253 475</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254 1,480</td> <td>2254 740</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255 2,010</td> <td>2255 1,005</td> <td>Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1401 330</td> <td>2401 165</td> <td>Notice of Appeal</td> <td></td> </tr> <tr> <td>1402 330</td> <td>2402 165</td> <td>Filing a brief in support of an appeal</td> <td></td> </tr> <tr> <td>1403 290</td> <td>2403 145</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>1451 1,510</td> <td>1451 1,510</td> <td>Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>1452 110</td> <td>2452 55</td> <td>Petition to revive - unavoidable</td> <td></td> </tr> <tr> <td>1453 1,330</td> <td>2453 665</td> <td>Petition to revive - unintentional</td> <td></td> </tr> <tr> <td>1501 1,330</td> <td>2501 665</td> <td>Utility issue fee (or reissue)</td> <td></td> </tr> <tr> <td>1502 480</td> <td>2502 240</td> <td>Design issue fee</td> <td></td> </tr> <tr> <td>1503 640</td> <td>2503 320</td> <td>Plant issue fee</td> <td></td> </tr> <tr> <td>1460 130</td> <td>1460 130</td> <td>Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>1807 50</td> <td>1807 50</td> <td>Processing fee under 37 CFR 1.17(q)</td> <td></td> </tr> <tr> <td>1806 180</td> <td>1806 180</td> <td>Submission of Information Disclosure Stmt</td> <td></td> </tr> <tr> <td>8021 40</td> <td>8021 40</td> <td>Recording each patent assignment per property (times number of properties)</td> <td>40.00</td> </tr> <tr> <td>1809 770</td> <td>2809 385</td> <td>Filing a submission after final rejection (37 CFR 1.129(a))</td> <td></td> </tr> <tr> <td>1810 770</td> <td>2810 385</td> <td>For each additional invention to be examined (37 CFR 1.129(b))</td> <td></td> </tr> <tr> <td>1801 770</td> <td>2801 385</td> <td>Request for Continued Examination (RCE)</td> <td></td> </tr> <tr> <td>1802 900</td> <td>1802 900</td> <td>Request for expedited examination of a design application</td> <td></td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Other fee (specify) _____</p> <p>*Reduced by Basic Filing Fee Paid</p> <p style="text-align: right;"><b>SUBTOTAL (3)</b> (\$ 40.00)</p> </div>	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	1051 130	2051 65	Surcharge - late filing fee or oath		1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet		1053 130	1053 130	Non-English specification		1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination		1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action		1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action		1251 110	2251 55	Extension for reply within first month		1252 420	2252 210	Extension for reply within second month		1253 950	2253 475	Extension for reply within third month		1254 1,480	2254 740	Extension for reply within fourth month		1255 2,010	2255 1,005	Extension for reply within fifth month		1401 330	2401 165	Notice of Appeal		1402 330	2402 165	Filing a brief in support of an appeal		1403 290	2403 145	Request for oral hearing		1451 1,510	1451 1,510	Petition to institute a public use proceeding		1452 110	2452 55	Petition to revive - unavoidable		1453 1,330	2453 665	Petition to revive - unintentional		1501 1,330	2501 665	Utility issue fee (or reissue)		1502 480	2502 240	Design issue fee		1503 640	2503 320	Plant issue fee		1460 130	1460 130	Petitions to the Commissioner		1807 50	1807 50	Processing fee under 37 CFR 1.17(q)		1806 180	1806 180	Submission of Information Disclosure Stmt		8021 40	8021 40	Recording each patent assignment per property (times number of properties)	40.00	1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))		1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))		1801 770	2801 385	Request for Continued Examination (RCE)		1802 900	1802 900	Request for expedited examination of a design application	
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																																																																																																					
1001 770	2001 385	Utility filing fee	770.00																																																																																																																																																																																																					
1002 340	2002 170	Design filing fee																																																																																																																																																																																																						
1003 530	2003 265	Plant filing fee																																																																																																																																																																																																						
1004 770	2004 385	Reissue filing fee																																																																																																																																																																																																						
1005 160	2005 80	Provisional filing fee																																																																																																																																																																																																						
<b>SUBTOTAL (1)</b>			<b>(\$ 770.00)</b>																																																																																																																																																																																																					
Total Claims	20	- 20	= 0	X	Fee from below	0	Fee Paid	0																																																																																																																																																																																																
Independent Claims	2	- 3	= 0	X																																																																																																																																																																																																				
Multiple Dependent								0																																																																																																																																																																																																
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																																																																																																					
1202 18	2202 9	Claims in excess of 20																																																																																																																																																																																																						
1201 86	2201 43	Independent claims in excess of 3																																																																																																																																																																																																						
1203 290	2203 145	Multiple dependent claim, if not paid																																																																																																																																																																																																						
1204 86	2204 43	** Reissue independent claims over original patent																																																																																																																																																																																																						
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																																																						
<b>SUBTOTAL (2)</b>			<b>(\$ 0)</b>																																																																																																																																																																																																					
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																																																																																																					
1051 130	2051 65	Surcharge - late filing fee or oath																																																																																																																																																																																																						
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																																																						
1053 130	1053 130	Non-English specification																																																																																																																																																																																																						
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination																																																																																																																																																																																																						
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																																						
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																																						
1251 110	2251 55	Extension for reply within first month																																																																																																																																																																																																						
1252 420	2252 210	Extension for reply within second month																																																																																																																																																																																																						
1253 950	2253 475	Extension for reply within third month																																																																																																																																																																																																						
1254 1,480	2254 740	Extension for reply within fourth month																																																																																																																																																																																																						
1255 2,010	2255 1,005	Extension for reply within fifth month																																																																																																																																																																																																						
1401 330	2401 165	Notice of Appeal																																																																																																																																																																																																						
1402 330	2402 165	Filing a brief in support of an appeal																																																																																																																																																																																																						
1403 290	2403 145	Request for oral hearing																																																																																																																																																																																																						
1451 1,510	1451 1,510	Petition to institute a public use proceeding																																																																																																																																																																																																						
1452 110	2452 55	Petition to revive - unavoidable																																																																																																																																																																																																						
1453 1,330	2453 665	Petition to revive - unintentional																																																																																																																																																																																																						
1501 1,330	2501 665	Utility issue fee (or reissue)																																																																																																																																																																																																						
1502 480	2502 240	Design issue fee																																																																																																																																																																																																						
1503 640	2503 320	Plant issue fee																																																																																																																																																																																																						
1460 130	1460 130	Petitions to the Commissioner																																																																																																																																																																																																						
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																																																																						
1806 180	1806 180	Submission of Information Disclosure Stmt																																																																																																																																																																																																						
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	40.00																																																																																																																																																																																																					
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																																																						
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))																																																																																																																																																																																																						
1801 770	2801 385	Request for Continued Examination (RCE)																																																																																																																																																																																																						
1802 900	1802 900	Request for expedited examination of a design application																																																																																																																																																																																																						

SUBMITTED BY		(Complete if applicable)	
Name (Print/Type)	C. Frederick Koenig III	Registration No. (Attorney/Agent)	29,662
Signature		Telephone	215-568-6400
		Date	February 25, 2004

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

**SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.